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September 1, 2016

SUBMITTED VIA ECFS
Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: ***Ex Parte Notification***
WT Docket No. 13-185, *Amendment of the Commission's Rules with Regard to Commercial Operations in the 1695-1710 MHz, 1755-1780 MHz, and 2155-2180 MHz Bands*

Dear Ms. Dortch:

On August 30, 2016, John Hunter, Senior Director, Engineering and Technology Policy, T-Mobile US, Inc., and I met with the following members of the Commission's staff regarding the above-referenced proceeding:

Julius Knapp (OET)
Brian Regan (WTB)
Janet Young (WTB)
Ronald Repasi (OET)
Peter Daronco (WTB)

We distributed and discussed the attached presentation along with a brief update on T-Mobile's early coordination efforts with government agencies. We discussed the Space-Ground Link Subsystem (SGLS) and associated coordination requirements as outlined in the Joint FCC/NTIA Coordination Requirements Public Notice.[1] Specifically, we acknowledged T-Mobile's obligation to successfully coordinate its operations with the Department of Defense in advance of commencing commercial service and addressed potential concerns related to possible operational changes after a mutually agreed upon plan had been approved by the parties. To address those concerns we noted that should either entity (licensee or incumbent) make changes to its network outside the parameters to which the agreement was granted, that entity must work with the other to revise the coordination agreement to reflect the revised operations.

[1] *Coordination Procedures in the 1695-1710 MHz and 1755-1780 MHz Bands*, Public Notice, 29 FCC Rcd 8527 (2014).

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Pursuant to Section 1.1206(b)(2) of the Commission's rules, an electronic copy of this letter and the associated presentation is being filed for inclusion in the above-referenced docket and sent to each member of the Commission's staff with whom we met. Please direct any questions regarding this filing to the undersigned.

Respectfully submitted,

/s/ Steve B. Sharkey

Steve B. Sharkey
Vice President, Government Affairs
Engineering and Technology Policy

Attachment

cc: Above-noted FCC staff (via e-mail, with attachment)

SGLS Coordination

August 30, 2016

SGLS Locations, Frequency Use, And Coordination

Table 4.2.1-2: Locations and Transmit Information for SATOPS Sites

SATOP Site	Latitude	Longitude	Elevation above MSL (m)	Max Transmit Power (dBW)[2]	Max Antenna Gain (dB)	Auth Spectrum Use (MHz)
AN,MD	38-59-26.93N	76-29-24.74W	24	14.8	36	81
BAFB	39-42-55N	104-46-29W	1726	32	43	81
BP, MD	38-25-53.5N	77-05-06.4W	19	25	46	81
CAPEG	28-29-03N	80-34-21W	6	24	40	81
CP, CA	37-43-51N	121-52-50W	300	30	42	81
CTS	38-48-21.6N	104-31-40.8W	1910	31.2	45	81
EVCF	28-29-09N	080-34-33W	2	23	28	81
FB, AK	64-58-26N	212-29-39E	385	25	43	81
FB, NC	35-09-04N	78-59-13W	89	24	26.8	81
FB, VA	38-44-04N	077-09-12.5W	61	25	40	81
FH, TX	31-08-57N	97-46-12W	300	24	26.8	81
GNS	13-34-57.6	144-50-31.6E	208	15	40	81
GTS	13-36-54N	144-51-21.6E	218	37.1	45.1	81
HB,CA	33-44-49.89N	118-2-3.84W	11	24	26.8	81
HTS	21-33-43.2N	158-14-31.2W	430	32.1	45.4	81
JB,WA	47-06-11N	122-33-11W	86	24	26.8	81
KAFB	34-59-46N	106-30-28W	1600	28	38.4	81
KW, FL	24-32-36N	81-48-17W	2	24	26.8	81
LP, CA	34-06-31N	119-03-53W	439	31	43	81
MO,CA	36-35-42N	121-52-28W	102	14.8	36	81
NHS	42-56-45.6N	71-37-44.4W	200	38.6	45	81
PH, ME	44-24-16N	068-00-46W	6	31	38	81
PR, MD	38-16-28N	76-24-45W	6	24	26.8	81
SAC,CA	38-39-59N	121-23-33W	23	24	26.8	81
VTS	34-49-22.8N	120-30-7.2W	269	37.1	45	81

T-Mobile has been working cooperatively with DoD to identify interference from Space-Ground Link System (SGLS) and develop mitigation techniques for several licenses

T-Mobile will be exercising the Streamlined Coordination Option and the provisions included in the July 2014 FCC/NTIA Coordination Procedures Public Notice

Table 4.2.1-3: Locations and Operational Information for SATOPS Sites

SATOP Site	Radiation Time (%)	Instantaneous Spectrum Use Max (MHz)	Percent of Spacecraft in 1755-1780 MHz Sub-Band	% GEO Support
AN, MD	4	2	100	0
BAFB	18	2	0	100
BP, MD	45	5	100	0
CAPEG	46	2	0	0
CP, CA	Not currently operational	-	-	-
CTS	30	4	17	40
EVCF	< 1	4	17	40
FB, AK	11	2	0	0
FB, NC	2	1	0	0
FB, VA	20	4	0	50
FH, TX	2	1	0	0
GNS	9	2	0	100
GTS	100	20	17	40
HB,CA	2	1	0	0
HTS	70	5	17	40
JB,WA	2	1	0	0
KAFB	0.6	2	67	0
KW, FL	2	1	0	0
LP, CA	9	3	0	100
MO,CA	4	2	100	0
NHS	60	6	17	40
PH, ME	3	3	0	100
PR, MD	2	1	0	0
SAC,CA	2	1	0	0
VTS	65	6	17	40

Table Notes:

Percent Radiation Time – Percent of time site is transmitting estimated over a one year period.

Instantaneous Spectrum Use - The maximum spectrum amount in use at site at any single point in time.

Percent Spacecraft in Sub-Band - The percentage of spacecraft using the indicated sub-band estimated over a 1 year period.

Percent GEO Support - The percentage of spacecraft using the site that have a GSO orbit.

T-Mobile

SGLS Coordination Process

Through the coordination process, T-Mobile will:

- "Meet annually to discuss network deployments, current and future technologies, interference mitigation techniques, consumer experiences, and other relevant topics necessary to help the Federal Agency understand the evolving use of the band, and its impact upon SGLS operations." (AWS-3 PN, Appendix C-3, Section 5)
- Discuss "*operations that are substantially different from the CSMAC Working Group 3 studied concept of operations…during the annual meeting … unless an immediate meeting is required to mitigate new and/or unexpected interference.*" (AWS-3 PN, Appendix C-3, Section 6)
- Provide "federal incumbents remaining in the band…the flexibility to coordinate with commercial licensees if reasonable modification of existing, grandfathered operations are required in the future." (AWS-3 R&O,¶ 222)

Key to Success?

Successful Coordination:

Execution of and compliance with all terms of this Coordination Agreement meets the regulatory requirement for successful coordination in 47 CFR §27.1134.